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PAPERS READ BEFORE THE SOCIETY FROM MARCH 1896
TO JANUARY 1897.

1896.
Mar. 13. Note on the indexing of scientific papers. H. Seward.
Description of a spectroscope (the Bruce spectroscope)
recently constructed for use in connection with the
25-inch refractor of the Cambridge Observatory.
H. F. Newall.
Observations of the variable star *R. Carinae* from 1890
December to 1895 August. J. Tebbutt.
Discovery and observations of comet *Brooks* (*d.* 1895).
W. R. Brooks.
Observations of the variable stars *W*, *X*, and *Y Sagittarii*.
Lieutenant-Colonel E. E. Markwick.
Elliptical orbit elements of comet *b* 1894 (Gale). Rev.
T. Roseby.
Results of double-star measures with the 8-inch equa-
torial at Windsor, New South Wales, in 1895. J.
Tebbutt.
On the relative efficiency of a reflector and of portrait-
lenses for the delineation of celestial objects. Isaac
Roberts.
Observations of comets made at the Royal Observatory,
Edinburgh.
Note on Mr. Stone's paper "Expressions for the elliptic
co-ordinates of a moving point to the seventh order
of small quantities." E. W. Brown.
Fireball of 1895 November 22. W. F. Denning.
On the systematic errors of measures on photographic
plates. H. H. Turner.
Note on a curious light (the zodiacal light ?) as seen at
Oxford, 1896 March 4. H. H. Turner.
Variation of *T Centauri*. A. W. Roberts.
Results of micrometer measures of double stars made
with the 28-inch refractor in the years 1894 and 1895,
at the Royal Observatory, Greenwich. Communicated
by the Astronomer Royal.
A graphical method of solving Kepler's equation. H. C.
Plummer.
Note on the sensibly-cylindrical forms of the pivots of

- Mar. 13. the transit-circle of the Radcliffe Observatory, Oxford.
E. J. Stone.
Note on the zodiacal light of 1896 March 4. W. H. Robinson.
Note on Professor Turner's paper on the systematic errors of measures of photographic plates. W. H. M. Christie and F. W. Dyson.
Observations of comet *a* 1896 (Perrine-Lamp) made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
On the proper motions of certain fundamental stars. W. G. Thackeray.
- Apr. 10. Note on Professor Brown's note. E. J. Stone.
Occultation of *Jupiter*, 1893 February 20, observed at the Durham University Observatory.
Errata to paper on meridian observations of *Sirius* and *Procyon* made at the Royal Observatory, Greenwich. W. G. Thackeray.
Note on the solution by least squares of the equations arising in the reduction of photographic star-plates. H. Jacoby.
Ephemeris for physical observations of *Mars*, 1896-97. A. Marth.
Observations of comet *a* 1896 (Perrine-Lamp) made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
Some notes on the use and adjustments of the cœlostæt. H. H. Turner.
- May 8. Researches on the orbit of 42 *Comæ Berenices* = Σ 1728. T. J. J. See.
Further note on the light seen at Oxford on 1896 March 4. H. H. Turner.
Diameters of *Jupiter*, measured with the filar and double-image micrometers at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
Ephemeris of the satellites of *Mars*, 1896-97. A. Marth.
Photographs of the spectra of twenty-three characteristic helium stars; also photographs of the spectra of six stars of the third magnitude, showing the transitions from type to type. F. McClean.
Observations of comet *a* 1896 (Perrine-Lamp) and *b* 1896 (Swift), made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
- June 12. Observations of phenomena of *Jupiter's* satellites with the 9 $\frac{1}{3}$ -inch Cooke equatorial refractor at Mr. Crossley's Observatory, Bermerside, Halifax, in 1895-96. J. Gledhill.
On certain phenomena presented by *Jupiter's* satellites and their shadows during transit; with a note on the

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June 12. red spot, and on some methods of observing the transits of bright and dark spots across the central meridian. J. Gledhill.

Measures of the polar diameter and of the principal belts, and of two dark spots on *Jupiter*; and of satellites and their shadows in transit, made at Mr. Crossley's Observatory, Bermerside, Halifax, during the apparition of 1895-96. J. Gledhill.

Note on the period of *T Centauri*. A. W. Roberts.

Occultations of certain stars in *Præsepe* by the Moon on 1896 October 1, visible at Greenwich. Communicated by the Superintendent of the *Nautical Almanac Office*.

Cometary observations at the Liverpool Observatory in 1895. W. E. Plummer.

Galactic longitude and latitude of poles of binary star orbits. Alice Everett.

On the proper motion of B. D. +25°, No. 2874. W. W. Bryant.

An answer to certain questions asked in the *Bulletin Astronomique*, tome xiii., mai 1896, on time measurement. E. J. Stone.

Solar eclipse without instrumental means. E. J. Stone.

Note on a possible eclipse of *Jupiter's* second satellite by the shadow of the third, 1896 March 30. A. C. D. Crommelin.

Observations of comet *b* 1896 (Swift), made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.

Meridian observations of comet *b* 1896 (Swift) at lower transit, made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.

On the corrections to the right ascensions of stars derived from observations of the Sun made at Greenwich during the years 1836-95. W. G. Thackeray.

On the equipment of the astrophysical observatory of the future, with two appendices: Appendix I. On the support of large specula; Appendix II. On making the siderostat an instrument of precision. G. Johnstone Stoney.

Nov. 13. On the importance of accurately observing the *Leonids* this year. G. Johnstone Stoney.

On the comparison of reflector and portrait-lens photographs. E. E. Barnard.

Ephemeris for physical observations of *Jupiter*, 1896-97. A. Marth.

Data for computing the positions of the satellites of *Jupiter*, 1896-7. A. Marth.

Observations of comets and planets, made with the

- Nov. 13. 15-inch Dunecht refractor and wire micrometer at the Royal Observatory, Edinburgh.
 Observations of the phenomena of *Jupiter's* satellites at Windsor, New South Wales, in the year 1896. J. Tebbutt.
 The Sidereal System : revised in 1896. Maxwell Hall.
Mercury. P. Lowell.
 Determination of the rotation period and surface character of the planet *Venus*. P. Lowell.
 Remarks on the physical observations of *Jupiter*, made at the Adelaide Observatory, 1884-93. E. P. Sells.
 On the variation of uncanonical arbitrary constants ; with an application to the planetary theory. A. Y. G. Campbell.
 Mean areas and heliographic latitudes of Sun-spots in the year 1894, deduced from photographs taken at the Royal Observatory, Greenwich, at Dehra Dûn (India), and in Mauritius. Communicated by the Astronomer Royal.
 Observations of comet *f* 1896 (Perrine), made at the Royal Observatory, Greenwich. Communicated by the Astronomer Royal.
 Note on the effects of distance upon the spectra of physical clusters of stars. E. J. Stone.
 Observations of comet Perrine, 1896 Nov. 2, made at the Radcliffe Observatory, Oxford.
 Photographic stellar spectra of the variable star β *Lyrae*, and also of types III. and IV. F. McClean.
 Observation of comet Perrine 1895 IV., made at the Radcliffe Observatory, Oxford.
- Dec. 11. Report on the expedition to Japan to observe the total solar eclipse of 1896 August 9. W. H. M. Christie, E. H. Hills, and H. H. Turner. Communicated by the Joint Permanent Eclipse Committee.
 Report on the expedition to Norway to observe the total solar eclipse of 1896 August 9. A. A. Common. Communicated by the Joint Permanent Eclipse Committee.
 Report to the Joint Permanent Eclipse Committee on the expedition to Kiö Island. J. Norman Lockyer. Communicated by the Committee.
 Real paths of 101 meteors observed during the ten years ending November 1896. W. F. Denning.
 Catalogue of real paths of large meteors. G. von Niessl.
 Ephemeris for physical observations of the Moon, 1897. A. Marth.
 Observations of minor planets made at Windsor, New South Wales. J. Tebbutt.
 Comparison of the Sun's longitudes for 1901, computed from Newcomb's tables of the Sun, with those computed from Le Verrier's tables. A. M. W. Downing.

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Dec. 11. Ephemeris of the *Leonids*, with introductory remarks.
G. Johnstone Stoney.

On systematic errors in observing right ascensions of
nebulae. J. L. E. Dreyer.

The aurora of 1896 March 4. T. W. Backhouse.

Observation of Brooks' periodic comet, *c* 1896 (1889 V.),
made at the Radcliffe Observatory, Oxford.

Observations of the solar eclipse, 1896 August 8-9, at
Novaya Zemlya. E. J. Stone. Communicated by
the Joint Permanent Eclipse Committee.

Observations of comet *f* 1896 (Perrine), made at the
Royal Observatory, Greenwich. Communicated by
the Astronomer Royal.

On the inequality in the diurnal movement of stars due
to refraction, and a method of allowing for it in
astronomical photography. A. A. Rambaut.

Observations of the *Leonids* on 1896 Nov. 13 and 14.
A. A. Rambaut.

1897 Observations of the *Leonids*, made at the University
Jan. 8. Observatory, Oxford.

A method of clearing a lunar distance. F. C. Penrose.
Determination of the diameter and compression of the
planet *Mars*, from observations with the Repsold
heliometer of the Royal Observatory, Göttingen. W.
Schur.

On the comparison of reflector and portrait lens photo-
graphs. Isaac Roberts.

Orbit of 44 Boötis H I. 15=Sh. 193=Σ 1909. S. W.
Burnham.

Note on the magnitude of η *Argûs*, 1896. R. T. A.
Innes.

Heliographic co-ordinates of Sun-spots and faculae on
the Stonyhurst drawings. A. L. Cortie.

Note on Mr. A. Y. G. Campbell's paper "On the varia-
tion of uncanonical arbitrary constants, with an
application to the planetary theory." Sir R. S. Ball.

On differential refraction to terms of higher order than
the first. H. H. Turner.

Observations of comet 1896 I. (Perrine-Lamp), made at
the Radcliffe Observatory, Oxford. Communicated
by E. J. Stone.

Notes on meteors observed at Penarth, Glamorgan, on
1896 November 14. G. C. Thompson and H. W. L.
Tanner.

Observations of occultations of stars by the Moon, and
phenomena of *Jupiter's* satellites, made in the year
1896, at the Royal Observatory, Greenwich. Com-
municated by the Astronomer Royal.